

WHAT IS CLAIMED IS:

1. A contact lens comprising:

a lens body including a silicone hydrogel and structured and adapted to be located on an eye and having an anterior surface and a generally opposing posterior surface, wherein at least one of the anterior surface and the posterior surface is a substantially smooth, junctionless three dimensional asymmetrical surface, and the contact lens has a varied surface topography with at least one contour that defines a substantially junctionless varying radial thickness of the contact lens, the varied surface topography facilitating at least one of lens comfort, lens orientation, vertical lens translation, and lens stabilization when the contact lens is placed on a surface of a cornea of an eye.

2. The contact lens of claim 1 wherein the posterior surface is a substantially smooth, junctionless three dimensional asymmetrical surface.

3. The contact lens of claim 1 wherein the anterior surface is a substantially smooth, junctionless three dimensional asymmetrical surface.

4. The contact lens of claim 1 wherein both the anterior surface and the posterior surface are substantially smooth, junctionless three dimensional asymmetrical surfaces.

5. The contact lens of claim 1, wherein the contact

lens has a varied anterior surface defining a ballast.

6. The contact lens of claim 1, wherein the lens body has a varied anterior surface and a varied posterior surface defining a ballast.

7. The contact lens of claim 1, wherein the lens body includes a toric surface.

8. The contact lens of claim 1, wherein the posterior surface of the lens body is structured to approximate a curvature of a corneal surface when the lens body is placed on a surface of a cornea of an eye.

9. The contact lens of claim 1, wherein the lens body includes a multifocal optical zone.

10. The contact lens of claim 1, wherein the lens body is configured to correct or reduce a wavefront aberration of a patient's eye.

11. A contact lens comprising:

a lens body including a hydrophilic silicone polymer component, the lens body having a toric surface, and a varied surface topography with at least one contour that defines a substantially junctionless varying radial thickness of the contact lens, the varied surface topography facilitating at least one of lens comfort, lens orientation, vertical lens translation, and lens stabilization when the contact lens is placed on a surface of a cornea of an eye.

12. The contact lens of claim 11, wherein the lens body comprises a silicone hydrogel.

13. The contact lens of claim 11, wherein the hydrophilic silicone polymer component includes units from at least one monomer selected from a group consisting of silicon-containing monomers for polymerization into hydrophilic silicone polymers and mixtures thereof.

14. The contact lens of claim 13, wherein the at least one monomer is selected from the group consisting of siloxanes, silicon-containing acrylates, silicon-containing methacrylates, and mixtures thereof.

15. The contact lens of claim 11, wherein the lens body is structured to correct an astigmatism of an eye.

16. The contact lens of claim 11, wherein the lens body includes a ballast.

17. The contact lens of claim 11, wherein the varied surface topography is provided on an anterior surface of the contact lens.

18. The contact lens of claim 11, wherein the lens body includes a substantially smooth, junctionless three dimensional asymmetrical posterior surface.

19. The contact lens of claim 11, wherein the lens body includes a substantially smooth, junctionless three dimensional asymmetrical anterior surface.

20. The contact lens of claim 11, wherein the lens body includes a posterior surface structured to approximate a curvature of a corneal surface when the lens body is placed on a surface of a cornea of an eye.

21. The contact lens of claim 20, wherein the posterior surface is structured to maintain a substantially uniform distance between the posterior surface of the lens body and the corneal surface when the lens body is placed on a surface of a cornea of an eye.

22. The contact lens of claim 11, wherein the lens body is configured to correct or reduce a wavefront aberration of a patient's eye.

23. A contact lens comprising:

a lens body structured and adapted to be located on an eye and having an anterior surface and a generally opposing posterior surface, wherein at least one of the anterior surface and the posterior surface is a substantially smooth, junctionless three dimensional asymmetrical surface, and the contact lens has a varied surface topography defining a ballast and at least one contour that defines a substantially junctionless varying radial thickness of the contact lens, the varied surface topography facilitating at least one of lens comfort, lens orientation, vertical lens translation, and lens stabilization when the contact lens is placed on a surface of a cornea of an eye.

24. The contact lens of claim 23, wherein the lens body includes a hydrophilic silicone polymer component.

25. The contact lens of claim 24, wherein the lens body includes a silicone hydrogel.

26. The contact lens of claim 23, wherein the lens body includes a toric surface.

27. The contact lens of claim 23, wherein the posterior surface is a substantially smooth, junctionless three dimensional asymmetrical surface.

28. The contact lens of claim 23, wherein the anterior surface is a substantially smooth, junctionless three dimensional asymmetrical surface.

29. The contact lens of claim 23, wherein both the anterior surface and the posterior surface are substantially smooth, junctionless three dimensional asymmetrical surfaces.

30. The contact lens of claim 23, wherein the lens body is configured to correct or reduce a wavefront aberration of a patient's eye.

31. A contact lens comprising:

a lens body including a hydrophilic silicone polymer component, the lens body having a multifocal optical zone, and a varied surface topography with at least one contour that defines a substantially junctionless varying radial thickness of the contact lens, the varied surface topography facilitating at least one of lens comfort, lens orientation, vertical lens translation, and lens

stabilization when the contact lens is placed on a surface of a cornea of an eye.

32. The contact lens of claim 31, wherein the lens body comprises a silicone hydrogel.

33. The contact lens of claim 31, wherein the hydrophilic silicone polymer component includes units from at least one monomer selected from a group consisting of silicon-containing monomers for polymerization into hydrophilic silicone polymers and mixtures thereof.

34. The contact lens of claim 33, wherein the at least one monomer is selected from the group consisting of siloxanes, silicon-containing acrylates, silicon-containing methacrylates, and mixtures thereof.

35. The contact lens of claim 31, wherein the lens body includes a ballast.

36. The contact lens of claim 31, wherein the varied surface topography is provided on an anterior surface of the contact lens.

37. The contact lens of claim 31, wherein the lens body includes a substantially smooth, junctionless three dimensional asymmetrical posterior surface.

38. The contact lens of claim 31, wherein the lens body includes a substantially smooth, junctionless three dimensional asymmetrical anterior surface.

39. The contact lens of claim 31, wherein the lens body includes a posterior surface structured to approximate a curvature of a corneal surface when the lens body is placed on a surface of a cornea of an eye.

40. The contact lens of claim 39, wherein the posterior surface is structured to maintain a substantially uniform distance between the posterior surface of the lens body and the corneal surface when the lens body is placed on a surface of a cornea of an eye.

41. The contact lens of claim 31, wherein the lens body includes a bifocal optical zone.

42. The contact lens of claim 31, wherein the lens body includes a varied anterior surface and a varied posterior surface defining a ballast.

43. The contact lens of claim 31, wherein the lens body is configured to correct or reduce a wavefront aberration of a patient's eye.